UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,034	10/31/2003	Rodolphe Lourdel	0529-1021 1105	
466 YOUNG & TH	7590 02/06/2008 HOMPSON		EXAMINER	
.745 SOUTH 23RD STREET			SWIGER III, JAMES L	
2ND FLOOR ARLINGTON, VA 22202			ART UNIT	PAPER NUMBER
		•	3733	
				·
			MAIL DATE	DELIVERY MODE
			02/06/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		)X				
• •	Application No.	Applicant(s)				
	10/697,034	LOURDEL ET AL.				
Office Action Summary	Examiner	Art Unit				
	JAMES L. SWIGER	3733				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tirr vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 13 No	ovember 2007.					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)  Claim(s) 1-9 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5)  Claim(s) is/are allowed. 6)  Claim(s) 1-9 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/or	<u>:</u>					
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>5/4/2006</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119		•				
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D  5) Notice of Informal F  6) Other:	ate				

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biedermann et al (U.S. Patent No. 5,672,176) in view of Schultheiss et al. (US Publication 2002/0123752) and Varieur (US Patent 6,641,586).

Biedermann et al. disclose a device having a connector (5), a connecting rod (15), a screw having a spherical head (1) with a threaded body (2) and an external diameter greater than the spherical head (Fig. 3). Biedermann et al. further disclose a connecting element (16), vertical branches (11 and 12), a U-shaped opening (7), and a locking clip as a blocking device (20) with pressure screw (40). The Blocking device is considered the ring-like portion 20 in combination with the upper, threaded screw socket 45 to create a blocking device. The connecting element has a vertical bore (in the direction of arrow F in Fig. 1). Biedermann et al. also disclose a threaded socket (13). Biedermann et al. also disclose a device where the circular and screw-threaded portions form an internal shoulder. The disclosed device also has an internal diameter of the bore smaller than the threaded portion. Biedermann et al. finally discloses a cylindrical body with threaded screw external surface (46) with an internally opened bore (47) that can form a bearing surface.

It is also noted that the spherical screw head is also considered integral with the screw-threaded body (1, Fig. 3).

Biedermann et al. disclose the claimed invention except for, more specifically, an external diameter of the screw threads at the upper end is larger that the diameter of the spherical head. Schultheiss et al. disclose an anchoring system wherein the diameter of the spherical head is smaller than the diameter of the threads. This allows the anchor to be better fixed within the area of concern (see pars 0028-0032) within the bone. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Biedermann et al. having at least an anchor with the

Application/Control Number: 10/697,034

**Art Unit: 3733** 

above dimensions to better secure the device in use.

Biedermann et al. disclose the claimed device except for a connecting element with a threaded vertical bore, and an accompanying ring-shaped device that is threaded and cooperates with the threaded bore. Varieur '586 disclose a spinal fixation system with an internal core with threads and an cooperating inner ring with threads (66). This modification is to provide a better tightening of the screw system. See Col. 5, lines 27-35. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Biedermann et al. having at least the threaded engagement element system of Varieur to have a more secure spinal fixation device.

Claims 4-5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Biedermann et al. and Schultheiss et al. '752 and Varieur '586, as applied to claim 1 above and further in view of Marnay et al. (U.S. Patent No. 5,658,285). The combination of Biedermann et al. and Schultheiss et al. and Varieur disclose the above device except for a ring. Marnay et al. teaches a ring (20) with a collar (21). It would have been obvious to one skilled in the art at the time the invention was made to incorporate the ring of Marnay et al. into the device of the combination of Biedermann et al. and Schultheiss et al. and Varieur to support a better closure for the screw interface.

Regarding claim 5 in view of Marnay, the combination of Biedermann et al. and Schultheiss et al. and Varieur disclose the claimed invention except for the sizing of the dimensions of the cylindrical portion. It would have been an obvious matter of design

choice to one skilled in the art at the time the invention was made to construct the external diameter of the cylindrical portion slightly smaller than the internal diameter, so the larger external diameter can create a collar. The applicant has not disclosed that such measurements solve any stated problem or is anything more than one of numerous shapes or configurations a person ordinary skill in the art would find obvious for the purpose of providing a forming a collar on the cylindrical portion of the anchoring device. In re Dailey and Eilers, 149 USPQ 47 (1966).

Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Biedermann et al. and Schultheiss et al. and Varieur as applied to claim 6 above and in view of Puno et al. (U.S. Patent No. 5,360,431). The combination of Biedermann et al. and Schultheiss et al. and Varieur disclose the above invention except for a vertebral anchoring device with a socket having two opposite slots partially cutting the length of the cylindrical body. Also, these two separate portions are connected by a bridge to set limits on the size of the opening created by the slots. Puno et al. discloses a socket with slots (51) that is capable of keeping the two portions connected at the level of the shoulder and delimiting a maximal opening. It would have been obvious to one skilled in the art at the time the invention was made to incorporate the modifications of Puno et al. with the device of the combination of Biedermann et al. and Schultheiss et al. '752 to better secure the vertebral anchoring device and to impose limits on its capabilities.

## Response to Arguments

Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

## Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES L. SWIGER whose telephone number is (571)272-5557. The examiner can normally be reached on Monday through Friday, 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/697,034

Art Unit: 3733

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

2/3/2008

**JLS** 

F/U/170 /7. ROBERT SUPEXVISORA FATENT EXAMINER